

VARIA

VARIA 826 S WH KNX

VARIA 826 S BK KNX

8269210

8269211

Installation and operating instructions

Room thermostat

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VARIA 826 S KNX

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Basic safety instructions



WARNING

Danger of death through electric shock or fire!

➤ Installation should only be carried out by a professional electrician!

- The device can be installed in flush-mounted sockets in walls and is designed for use in a normal environment; device complies with EN 60730-1
- Professional installation of bus lines and commissioning of devices requires compliance with the provisions of EN 50428 for switches or similar installation equipment for use in building systems technology! Tampering with, or making modifications to, the device will invalidate the guarantee

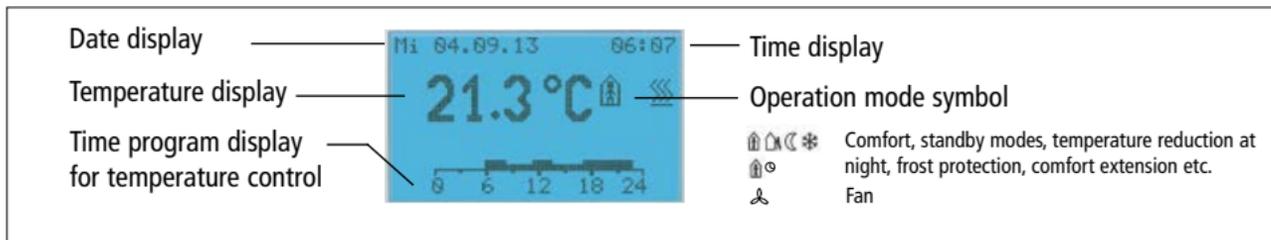
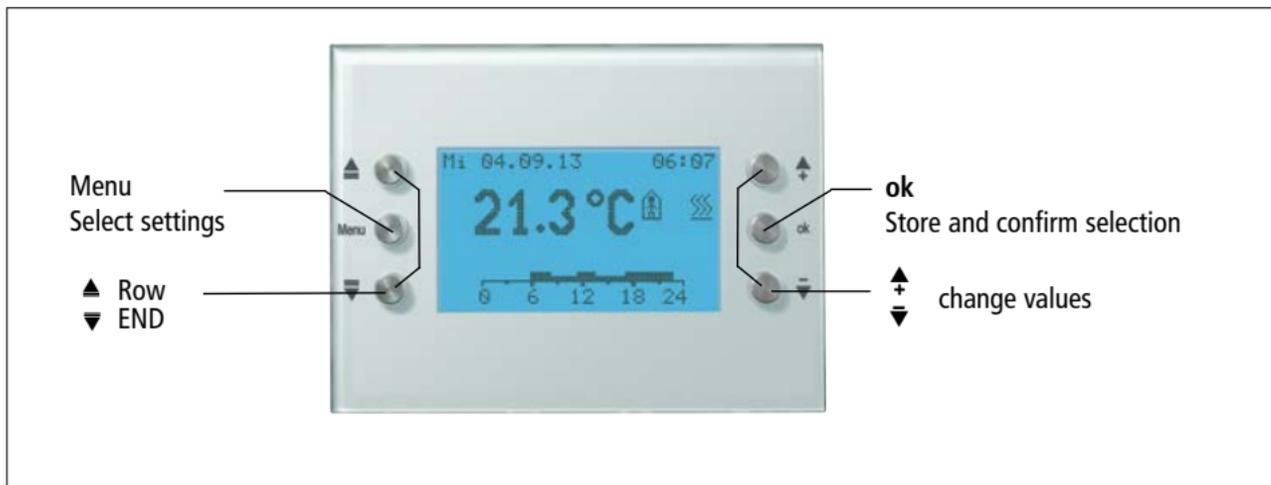
Designated use

- VARIA controls all room functions such as heating, air conditioning, ventilation, lighting and sun protection
- Only to be used in closed, dry rooms (house, office, conservatory etc.)

Disposal

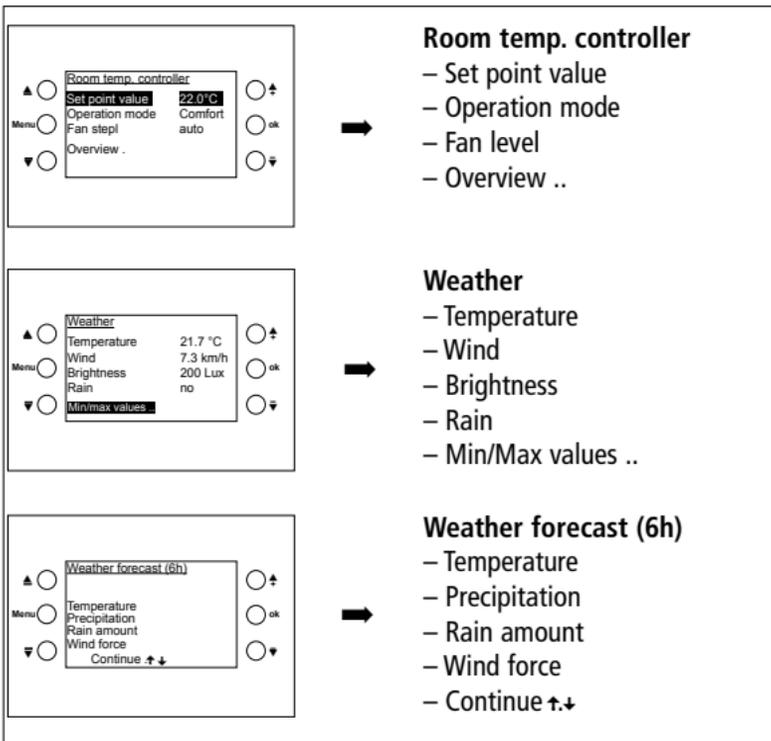
Dispose of device in environmentally sound manner

Screen and keys



Overview

For daily use ...



The first screenshot shows the 'Room temp. controller' menu with options: Set point value (22.0°C), Operation mode (Comfort), Fan slept (auto), and Overview ..

The second screenshot shows the 'Weather' menu with options: Temperature (21.7 °C), Wind (7.3 km/h), Brightness (200 Lux), Rain (no), and Min/max values ..

The third screenshot shows the 'Weather forecast (6h)' menu with options: Temperature, Precipitation, Rain amount, Wind force, and Continue ↕.

➔

Room temp. controller

- Set point value
- Operation mode
- Fan level
- Overview ..

➔

Weather

- Temperature
- Wind
- Brightness
- Rain
- Min/Max values ..

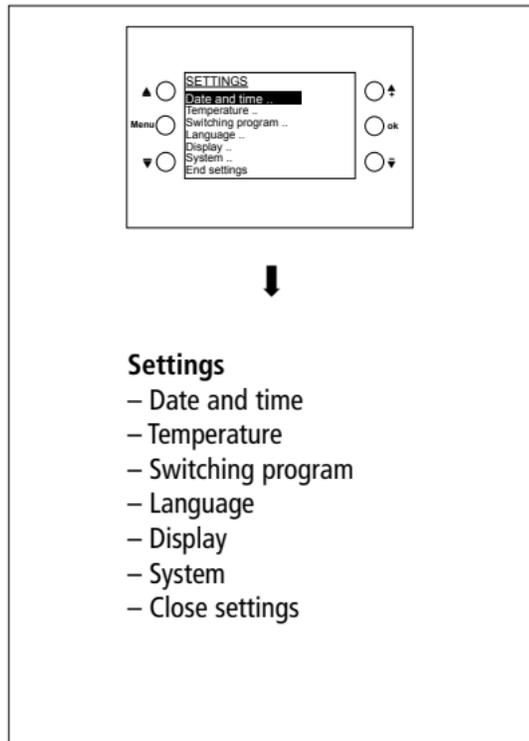
➔

Weather forecast (6h)

- Temperature
- Precipitation
- Rain amount
- Wind force
- Continue ↕

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For occasional use ...



The screenshot shows the 'SETTINGS' menu with options: Date and time ..., Temperature .., Switching program .., Language .., Display .., System .., and End settings.

↓

Settings

- Date and time
- Temperature
- Switching program
- Language
- Display
- System
- Close settings

Connection

 **WARNING**

Danger of death through electric shock!

- Must only be installed by professional electrician!
- Disconnect power source!
- Cover or shield any adjacent live components.
- Ensure device cannot be switched on again!
- Check power supply is disconnected!
- Earth and bypass!
- Ensure installation height of 1.5 m.

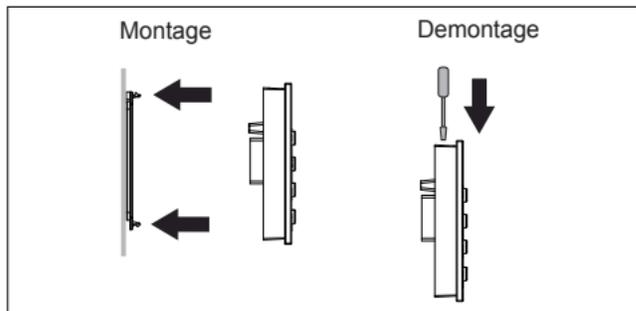
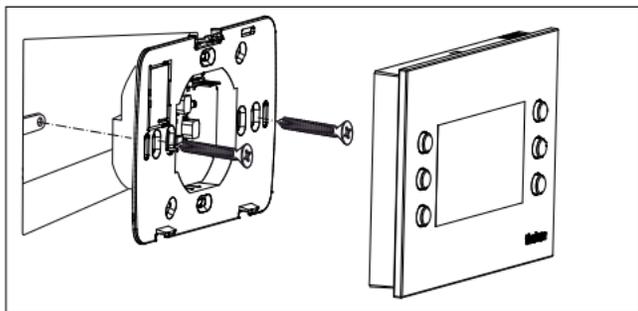
Installation

All 3 lugs on the device (top and bottom) must be firmly clicked into place.

- Remove protective film.

Dismantling

- Press down on the top of the device with a screwdriver to release the device from the wall.



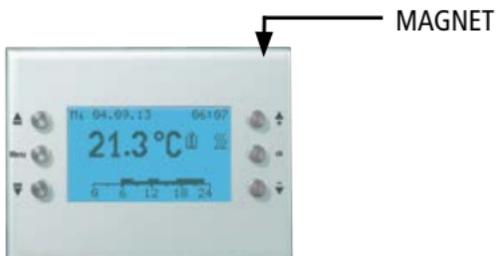
Program physical address

➤ Move a magnet along the right upper side of the device.

→ The programming LED lights up

→ VARIA is in program mode

The program mode can also be set using the settings menu under system.



Start-up, diagnostics and configuration are handled by ETS (KNX tool software).

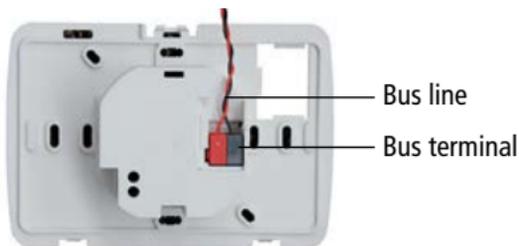
Bus connection

➤ Open cover.

➤ Plug bus line into bus terminals.
Ensure correct polarity.

➤ Plug bus terminal into the device.

➤ Close flap.



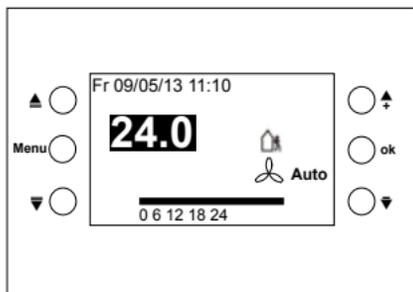
Remove bus line

➤ Remove the bus line with a twist-pull motion from the bus terminal.

User operation

Start-up

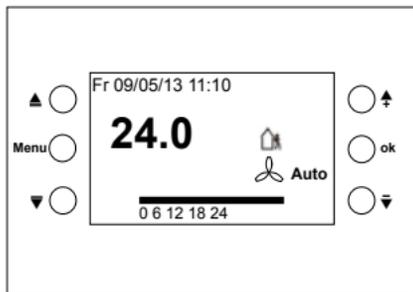
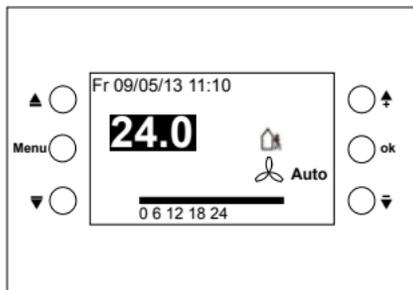
Date and time are preset ex works. Different pages can be displayed. The pages displayed depends on the programming by a professional electrician. Please refer to the Product Handbook for detailed functional descriptions (at www.theben.de).



Quick access – Room temperature control

Example for a Favorites/Overview page

- With the keys ▲ ▼ set desired room temperature.



Hot key function

Special function for easy switch on/off (e.g. lighting).

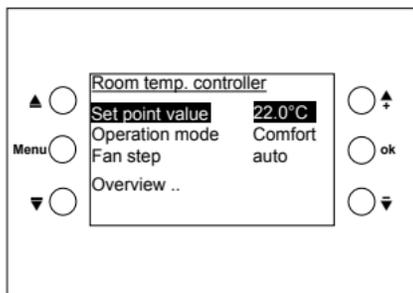
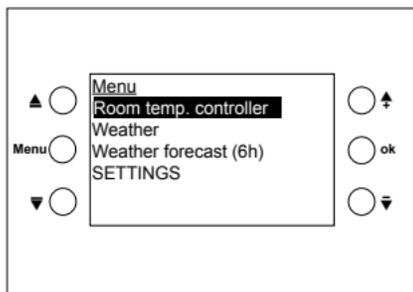
Function: The light can be switched on or off by pressing the buttons \uparrow /ok or $\bar{\vee}$.

This function must be activated by a professional electrician.

Operation modes/fan levels

You can choose between 5 operation modes:

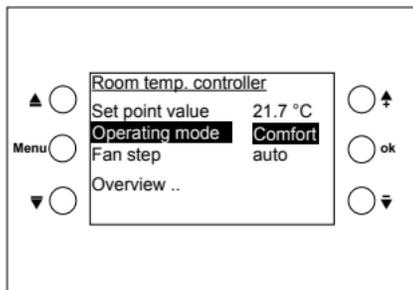
-  Comfort mode
-  Standby mode
-  Temperature reduction at night
-  Frost protection
-  Comfort extension
-  Fan: You can choose Auto, On/Off or the fan levels 1, 2, 3.



Room temp. controller menu

Room temperature/change setpoint value

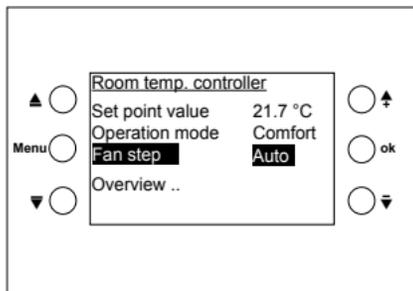
- Press **Menu** button.
- Confirm **room temperature controller** with **ok**.
- With **▲ ▼** set the desired set point.
- Confirm with **ok**.



Change operation mode

- Press **Menu** button.
- Confirm **room temperature controller** with **ok**.
- With the keys **▲ ▼** select **operating mode**.
- With **▲ ▼** set the desired operating (page 10) mode.
- Confirm with **ok**.

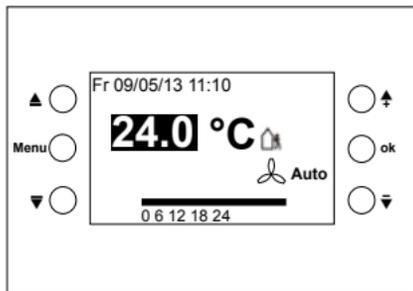
Comfort extension is not possible if presence detectors are used.



Change fan stage

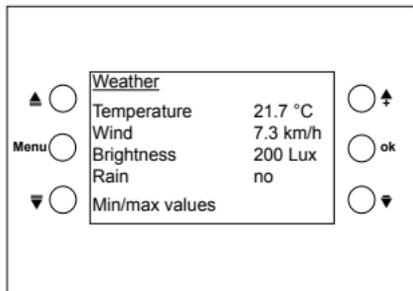
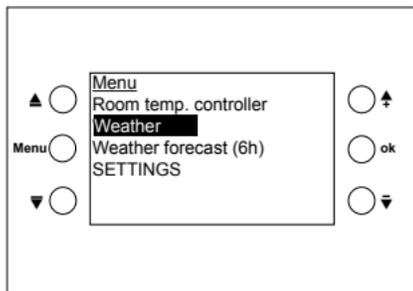
- Press **Menu** button.
- Confirm **room temperature controller** with **ok**.
- With the keys ▲ ▼ select **fan level**.
- With ▲ ▼ set the desired fan level.

The following appears in the display when a fan coil actuator is connected . You can choose from Auto, On/Off or fan levels 1, 2, 3.



Overview ..

- Press **Menu** button.
- Confirm **room temperature controller** with **ok**.
- With the keys ▲ ▼ select **overview**.
- Confirm with **ok**. The overview page appears.



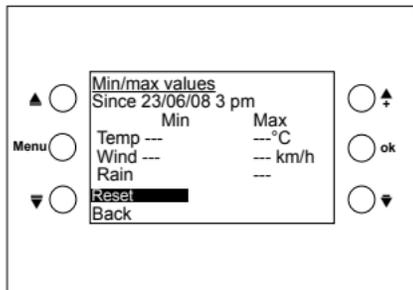
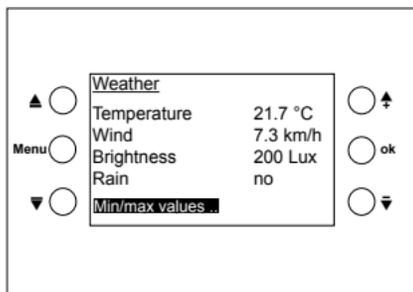
Weather menu

Display for temperature, wind speed, brightness and rain values (from a weather station)

Query weather data

- Press **Menu** button.
- With the keys **▲ ▼** select **weather**.
- Confirm with **ok**.

The weather data appears in the display.



Query min/max values

- Press **Menu** button.
- With the keys **▲ ▼** select **weather**.
- Confirm with **ok**.
- Confirm **min/max values** with **ok**.

The minimum and maximum temperature, wind and rain values are displayed from the start of the recording operations.

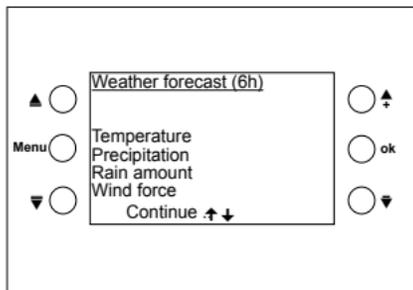
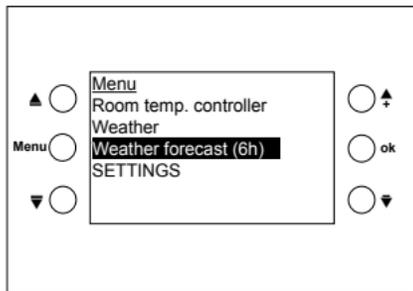
Rest min/max values

- With **▲ ▼** **Reset**.
- Confirm with **ok**.

The record is deleted and restarted.

The **min/max values** function only appears if it is selected by the professional electrician.

Professional electrician operation



Weather forecast menu (6h)

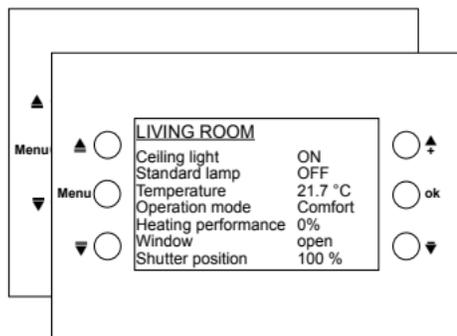
(the menu only appears when it was set by the electrician)

- Press **Menu** button.
- With the keys ▲ ▼ select **Weather forecast (6h)**.
- Confirm with **ok**.

The weather data appears in the display.

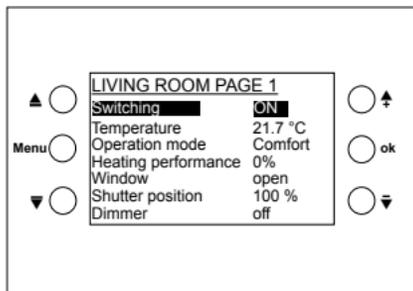
Pages freely programmable via ETS

Display of values and control of different functions in 8 lines: light scenes, sun protection systems, etc. (up to 40 values/functions).



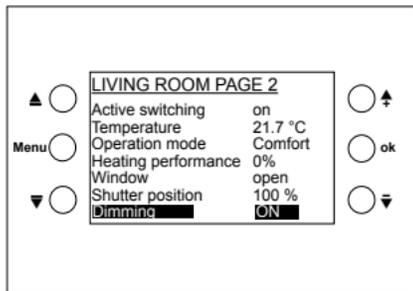
The texts are set by the professional electrician and appear automatically in the display.

- Press **Menu** button.
- With the keys ▲ ▼ select e.g. **living room**.
- Confirm with **ok**.



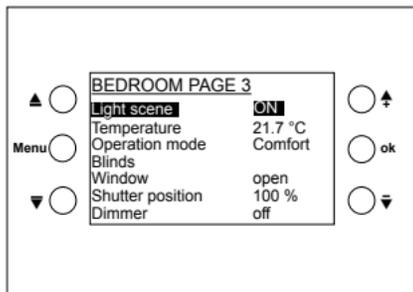
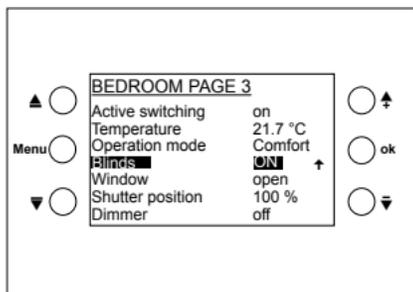
1. "Switching" example

- With ▲ ▼ select **Switching**
- Press ▲ ▼ push button. The displayed value changes, a telegram is sent.
- Press **ok**. The displayed value is sent.



2. "Dimming" example

- With ▲ ▼ select **Dimming**
- Press push button ▲ ▼ briefly. The light is switched **On/Off**
- Press push button ▲ ▼ and hold for some time. This appears ↑ ↓: The dimming telegram is sent.
- Press **ok**. The displayed value is sent.



3. "Blinds" example

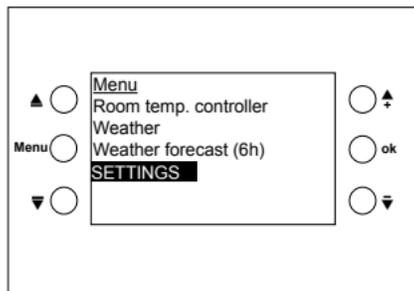
- With ▲ ▼ select **Blinds**
- Press push button ▲ ▼ briefly. The blinds slat position is changed.
- Press push button ▲ and hold for some time. This appears ↑ ↓: The corresponding value is sent.

A professional electrician can adjust the setting so that the blinds stop once the button is released or when **ok** is pressed.

4. Example: "Temperature", "Light scenes", "Percentage values" etc.

- With ▲ ▼ e.g. select **Light scene**
- Press push button ▲ ▼ briefly.
- Press **ok**. The displayed value is sent.

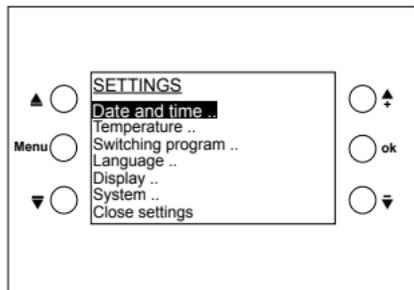
Professional electrician operation



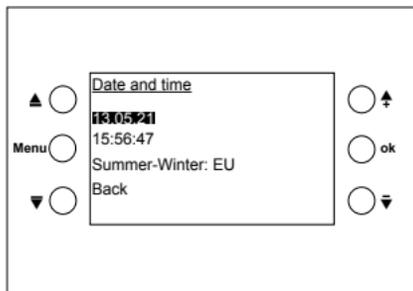
SETTINGS menu

The PIN code appears first (if set by professional electrician).

- Press **Menu** button.
- Using the push buttons ▲ ▼ select **SETTINGS**.
- Enter the figures with ▲ ▼ and confirm with **ok**.

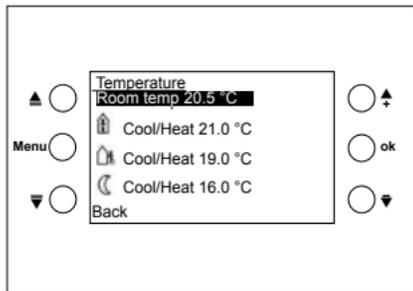


- Afterwards using ▲ ▼ select desired line.
- Confirm with **ok**.



Setting date and time..

- With ▲ ▼ select desired line.
- Confirm with **ok**.
- With ▲ ▼ change the value.
- Confirm with **ok**.



Set temperature

Set room temperature: Comparison with the existing room temperature

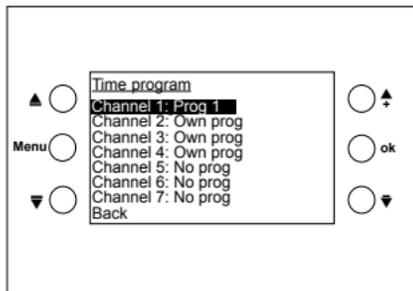
- With ▲ ▼ select desired line.
- With ▲ ▼ change the value.
- Confirm with **ok**.

Each value can be set separately. There are, however, minimum/maximum permitted differences between the values, which are automatically adjusted if necessary.

Set time program

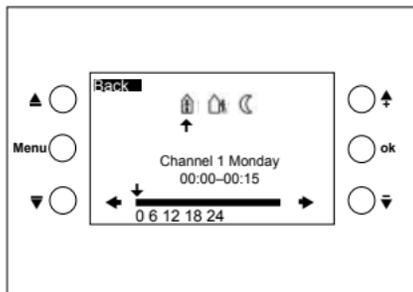
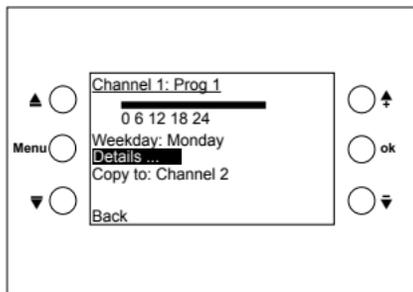
There are 8 channels with weekly programs (minimum switching interval of 15 min.) (see table on page 30).

- Channel 1 is allocated to the room thermostat (RTR) and has the following operation modes: Temperature reduction at night, standby and comfort
- For every channel can – no program can be selected among:
 - the fixed programs (Prog 1–3)
 - a freely programmable program (own program)



- With ▲ ▼ select desired channel.
- Using ▲ ▼ select program.
- Confirm with **ok**.

If no prog. or prog. 1–3 is selected, a previously programmed internal program is faded out rather than deleted.



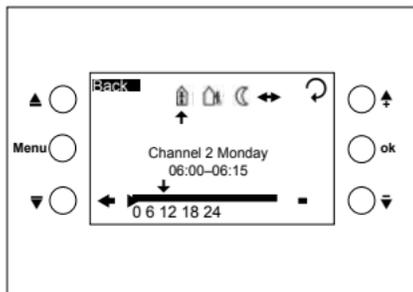
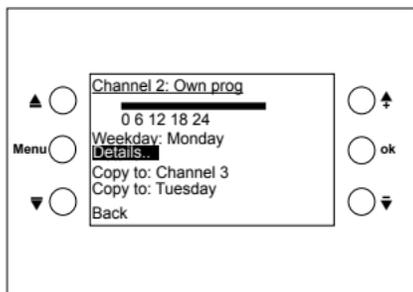
Set time program

You can now can select between various functions:
Weekday, Details .., Copy to ..

Using the **Details ..** menu, you can see all the programs in detail.

The buttons on the VARIA device are given a different function. Example:

- ▲ End time program Back
- ▼ Move left in time bar ←
- ▾ Move right in time bar →
- Arrow ↓ in display points to current time in time bar 0-24 hrs
- ⬆ Select operation mode ↻
- Arrow ↑ shows the relevant operation mode



Set time program

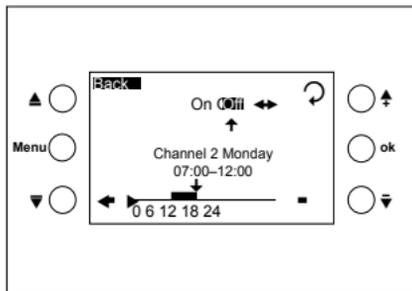
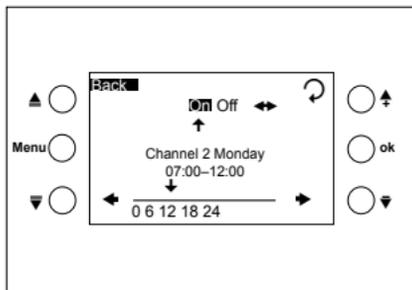
Set own program

The buttons now have a different function (see p. 23).

Details

Using the **Details** .. menu, you can change the operation mode or switching status or time.

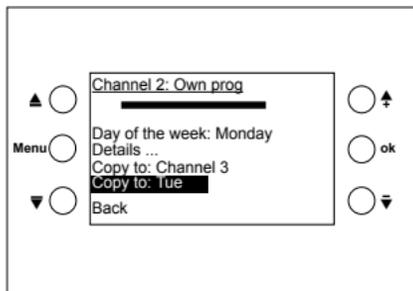
- With select the operating mode or with or set the desired time.
- Confirm with **ok**.



Set specific times

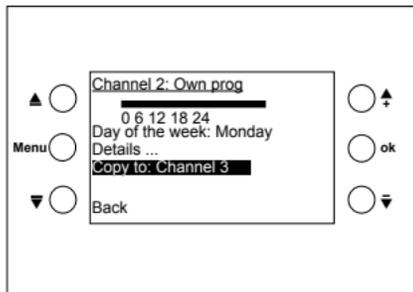
e.g. set time from 7:00–12:00 (ON)

- With ▾ set the arrow to 7:00 am.
- With ⬆ select **On**.
- With ▾ set the arrow to 12:00 am.
- Confirm with **ok**.



Copy to: Tuesday (example)

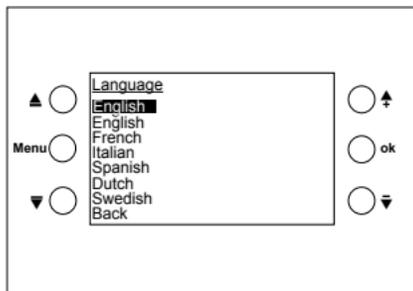
- With the push buttons ▲ ▼ select **Copy to: Tuesday**
- With ▲ ▼ set the day of the week.
- Confirm with **ok**.



Copy to: Channel 3 (example)

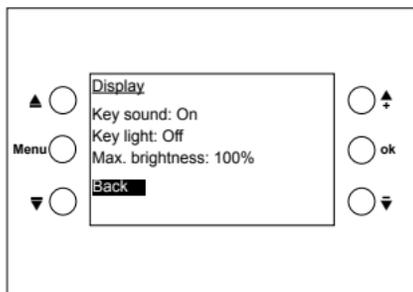
- With the push buttons ▲ ▼ select **Copy to: Channel 3**
- With ▲ ▼ set the channel.
- Confirm with **ok**.

The whole weekly program is copied.



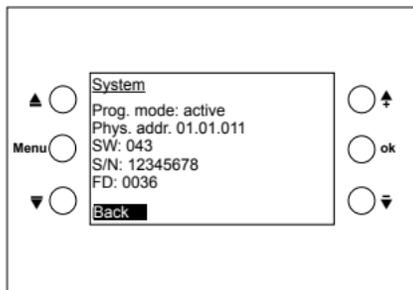
Setting the language

- With ▲ ▼ select desired line.
- Confirm with **ok**.



Setting the display

- With ▲ ▼ select desired line.
- With ▲ ▼ change the value.
- Confirm with **ok**.



System

Professional electrician operation only!

Prog. mode: with   change.

Phys. add. (physical address)

SW (Software version)

S/N (Serial number)

FD (Finishing date)

Technical data

- Operating voltage: Bus voltage KNX
21 – 32 V DC
- Power input KNX bus: ≤ 10 mA (without key
light)
≤ 24 mA (with 100 %
key light)
- Bus terminal: bus connection
- Power reserve: 1.5 years
- Permissible ambient
temperature: 0 °C ... +45 °C
- Protection class: III in accordance with EN
60730-1
- Protection rating: IP 20
- Mode of operation: type 1 SU in accordance
with EN 60730-1
- Battery type: CR2032
- Rated impulse voltage: 0,8 kV
- Pollution degree: 2

The ETS database is available at www.theben.de
Please refer to the KNX Handbook for detailed
functional descriptions.

GB

Service address/Hotline

Service address

Theben AG
Hohenbergstr. 32
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www.theben.de

